REMARKS

Claims 1 and 28 are amended to recite that each reflector has "an outer edge" and that "the beveled peripheral portion is such that a distance between each first or second reflector and its respective closest first or second structural component is increasing in a direction towards the outer edge of the reflector" as supported in, e.g., Fig. 5.

Claim 23 is similarly amended as supported in, e.g., Fig. 6.

The present amendment contains no new matter.

The Rejections

Claims 23, 25, 26, 30-33, 35 and 36 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

Claims 1, 22, and 28 stand rejected under 35 U.S.C. § 103(a) a s unpatentable over Ohmi et al. (WO 98/57884 with translation in U.S. Patent 6,093,662) [hereinafter "Ohmi '884"] in view of Ohmi et al. (JP 10-297907 with translation in U.S. Patent No. 6,180,067) [hereinafter "Ohmi '907"].

In view of the amendments and arguments presented herein, Applicants respectfully traverse the present rejections and request reconsideration and allowance of the remaining claims for the following reasons.

Arguments

Rejections Under 35 U.S.C. § 112, First Paragraph

The Examiner asserts that the limitation "the plate has a thickness exceeding one half of the first distance," added by amendment, is not supported by the drawings. On the contrary, the amendment is well supported as discussed in detail below.

First, attached please find a Declaration Under Rule 112 establishing that one of skill in the art would recognize that Fig. 6, originally filed in the present application, describes a reflector plate having a thickness exceeding one half of the distance between the supply passage and the outlet passage (i.e., "a first distance"). Moreover, the declarant states that the "thickness" of the reflector plate would refer to the thickness at the central portion of the plate. The Declaration contains facts sufficient to overcome the Examiner's assertions, without factual basis, that the drawings are not to scale and insufficient to support the amendment. Moreover, Applicants point out that Fig. 12 does have a scale, further rebutting the assertion that the drawings are not to scale.

Second, patent law as established by the Federal Circuit states that a drawing alone may provide a written description of the invention, sufficient to satisfy statutory requirements, when the drawing discloses the claimed invention to one skilled in the art.

Vas-Cath Inc. v. Mahurkar, 935 F.2d 1555, 1565 (Fed. Cir. 1991). In Vas-Cath, the court found that a drawing in a design application could support a later utility application, and that the lower court erred in "applying a legal standard that essentially required the drawings of the '081 design application to necessarily exclude all diameters other than those within the claimed range." Id. The facts in the present application are analogous to those in Vas-Cath, which is controlling law.

In view of the Declaration Under Rule 132 submitted herewith and the established law of written description, Applicants respectfully traverse the rejections under § 112, first paragraph, and request reconsideration and withdrawal of same.

Rejections Under § 103

Each of the two independent claims rejected under § 103 has been amended to recite that the beveled peripheral portion of the reflector is such that a distance between the

reflector and the closest structural component is increasing in a direction towards the outer edge of the reflector. This increasing distance has the advantage of preventing elevated local temperature when in operation. In contrast, the edge treatment of Ohmi '907 (drawing ref. no. 12b) shows the distance between the two parts decreasing or remaining the same along this area, which would not have the desired effect of preventing elevated local temperature. Moreover, the U.S. Patent 6,180,067, relied upon for translation of Ohmi '907, describes the resulting gap G as serving to force reaction completion (col. 12, lines 51-53), which would actually <u>increase</u> local temperature. Because the added claim element is not taught, or even suggested, by the references, Applicants respectfully traverse the rejections under § 103 and request reconsideration and withdrawal of same.

Claims 34 to 37 are Further Patentable

The Examiner contends that bolts and welding are equivalent and obvious substitutions. On the contrary, if a reflector is secured by welding, the treated inner surface of a structural component may be damaged. Or, if the welding occurs before surface treatment, it becomes difficult to perform surface treatment in the narrow confines with the reflector fixed in place. The use of bolts in the present invention, as recited in claims 34 to 37, overcomes this problem. Thus, in bolts are not equivalent to welding, and the Examiner's position is factually incorrect.

Conclusion

For all of the above reasons, claims 1, 22, 23, 25, 26, 28 and 30-37 are in condition for allowance, and a prompt notice of allowance is earnestly solicited.

Questions are welcomed by the below signed attorney of record for the Applicants.

Respectfully submitted,

GRIFFIN & SZIPL, P.C.

GRIFFIN & SZIPL, P.C. Suite PH-1 2300 Ninth Street, South Arlington, VA 22204

Telephone: (703) 979-5700 Facsimile: (703) 979-7429 Email: GandS@szipl.com Customer No.: 24203